

Follow-up Pass Rate (FPR)

The Follow-up Pass Rate is a long-term STAR performance measure that evaluates the performance of both stations and inspectors. It is the only performance measure that evaluates the performance of an inspector to determine a station's eligibility for the STAR Program. For this reason, FPR scores are given to both Smog Check stations and inspectors.

The FPR performance measure examines whether vehicles certified by stations and inspectors in their previous inspection cycle are passing their current initial inspection at a higher or lower rate than expected for "similar vehicles." Station FPR scores reflect the performance of the station at the time the vehicles were previously certified at that station. Inspector FPR scores reflect the performance of the inspector at the time they last certified the vehicle, regardless of the station at which the inspector worked when he/she previously certified the vehicle. Smog Check inspection performance during the previous inspection cycle is measured by comparing, in the current cycle, the actual failure rate on initial tests to the expected failure rate for similar vehicles statewide. An initial inspection may be an official inspection or a pretest and is the first test performed on a vehicle in its current inspection cycle, which may be for biennial inspection, change-of-ownership, or initial registration. Previously certified vehicles passing at a higher rate than similar vehicles in the current inspection cycle is an indicator of better Smog Check inspection performance in the previous inspection cycle. "Similar vehicles" means vehicles of the same model year, make, model, engine displacement, transmission type, and body style.

To better understand how this performance measure works, consider the following conceptual example. Two-hundred 1995 Ford Mustangs, with 5.0 liter engines, were gross polluting at the start of their previous inspection cycle. Half of these vehicles were tested improperly and certified to get the vehicles to pass without the necessary emissions repairs. The other half were tested properly, failed the inspection, repaired properly, and then certified properly. Vehicles from which of the two populations will pass at a lower rate in their next inspection cycle?

The answer to this question is clear. Unless the improperly tested vehicles received some repairs subsequent to their last inspection, they will continue to be high-polluting vehicles in their current inspection cycle. Some of the vehicles that were properly inspected, repaired, and certified in the previous inspection cycle may fall into disrepair by the time of their next inspection cycle. However, a majority of these repaired

vehicles will continue to have comparatively lower emissions levels when inspected in the next inspection cycle. As a result, the vehicles that were properly inspected, repaired, and certified will fail at a much lower rate in their next inspection cycle.

FPR scores range from zero to one. A score of zero means that we are 100% confident that the performance at a station or by an inspector is below average in comparison to other stations or inspectors. In other words, that station or inspector is, for the most part, not performing proper inspections. A score of one means we are 100% confident that the performance at a station or by an inspector is above average. In other words, that station or inspector is, for the most part, performing proper inspections. FPR scores are calculated twice a year, on July 1 and January 1.

Since the FPR performance measure examines whether vehicles certified in their previous inspection cycle are passing their current inspection at a higher or lower rate than expected, newly licensed stations and inspectors will initially not have an FPR score. FPR scores for new stations and inspectors can be produced once the vehicles they have certified are tested in their next inspection cycle. Similarly, stations and inspectors with extremely low test volumes cannot be evaluated on the FPR because there is insufficient data to form a statistically valid assessment of their performance. In cases where an FPR score cannot be produced, the FPR score is shown as “No Score.”

Because the FPR simply compares the Smog Check failure rate in the current inspection cycle of vehicles previously certified by each station and inspector to the failure rate for similar vehicles in the same inspection cycle, a number of different inspection-related behaviors can affect one’s FPR score. In short, any behavior that helps a vehicle pass an inspection when the vehicle should otherwise fail the inspection will tend to lower the FPR score of a station and/or inspector.

Specific behaviors that affect a station’s or inspector’s FPR score include:

1. Clean piping (i.e., passing a vehicle that is out of compliance with the tailpipe emissions standards by introducing a substitute clean exhaust sample through the emissions analyzer)
2. Clean plugging (i.e., using a substitute source of OBD II data for a failing vehicle’s OBD II self-diagnostic test)
3. Shifting vehicles into the wrong gear during an ASM test
4. Over-conditioning vehicles (i.e., racing the engine to get a vehicle’s catalytic converter hotter than would happen under normal operating conditions)
5. Not identifying visual inspection failures

6. Not identifying functional inspection failures (e.g., fuel cap, ignition timing, low-pressure fuel evaporative emissions)
7. Entering incorrect vehicle parameters to generate more lenient emission standards or a lighter vehicle weight loading (in order to create less treadmill resistance) during an ASM test

Stations and inspectors with low FPR scores can improve their performance by performing accurate inspections appropriate to the vehicle being inspected according to the [Smog Check Procedures Manual](#).

Overall FPR Result

While both Smog Check stations and inspectors are given FPR scores, the process for determining whether a station is eligible for the STAR Program -- both on initial application and after becoming STAR certified -- rests, in large part, on the FPR score of the inspector(s) performing inspections at that station. In other words, the inspector FPR score is considered first when determining a station's eligibility for the STAR Program. The only time a station FPR score is considered is when an inspector does not have an FPR score, either because that inspector is a new licensee or does not have enough inspection data to establish an FPR score. Under these circumstances, the Web page will indicate that the inspector or station has an FPR score of "No Score."

There are two ways a station may bring an inspector into the STAR Program. The first occurs when a station initially applies for STAR certification using all of the inspectors currently listed in the Technician Information Table of each EIS owned by the station. The other occurs when a station, after becoming STAR-certified, wants to bring in a different inspector to perform Smog Check inspections at the station. In either case, the inspector's FPR score must be greater than or equal to 0.4. If an inspector does not have an FPR score, then the station's FPR score must be greater than or equal to 0.4. It is also possible for an inspector without an FPR score to perform Smog Checks at a STAR station without an FPR score, provided the station has at least one calendar quarter of data for the STAR short-term performance measures. This situation can occur if both the inspector and station are new licensees.

Once a station brings an inspector into the STAR Program with a score greater than or equal to 0.4, that inspector may remain in that station's EIS Technician Information Tables without affecting the station's STAR certification until his or her score drops below 0.1. If, however, an inspector does not have an FPR score, he or she may remain in a station's EIS Technician Information Tables until that station's FPR score drops below 0.1.

It is important to note that the station FPR score will not automatically change with the addition of higher scoring inspectors or removal of lower scoring inspectors from the station's EIS Technician Information Tables. The station FPR score is strictly based upon the performance of vehicles previously certified at that station, regardless of which inspector certified the vehicle. The inspector score is based strictly on the vehicles previously certified by that inspector, regardless of which station he or she worked at when certifying the vehicles. Consequently, a station FPR score will not change based upon the addition or removal of inspectors from the station's EIS Technician Information Tables.